

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,471	04/21/2006	Frank J. M. Benschop	PHNL031299US	1170	
38107 7590 12/13/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P. O. Box 3001			EXAM	EXAMINER	
			BOR, HELENE CATHERINE		
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER	
			MAIL DATE	DELIVERY MODE	
			12/13/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/595,471 BENSCHOP ET AL. Office Action Summary Examiner Art Unit HELENE BOR 3768 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 11 June 2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 3-15 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 3-15 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 28 September 2008 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 3768

#### DETAILED ACTION

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 4-7, 10-11, & 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gropper et al. (WO 03/046689: enclosed herein).

Claim 4-7, 10-11, & 14-15: Gropper teaches a control system to control the execution of operational items by the diagnostic imaging system (Page 16, Para 0053). Gropper teaches a user interface coupled to the control system, the user interface including a scheduler module which generates an ordered selection of operational items autonomously ordered by the selector module for execution under control of the control system (Page 14, Para 0046). Gropper teaches the ordered selection being generated by arranging the operational items in said ordered selection of operational items based on parameter settings of the operational items wherein the scheduler module is configured to issue instructions to the user promoted by the operational items during imaging (Page 3, Para 0009 & 0011, Page 4, Para 0013-0014, Page 11, Para 0036, Page 14-15, Para 0048, & Claim 24 & 26). Operational items are described in the

Art Unit: 3768

various different functions such as patient handling functions and handling of patient information therefore parameters settings such as medical study data, patient data, patient location information and institution data as data items entered in the system of Gropper read on the operational items as disclosed by the Applicant. Gropper teaches wherein the imaging apparatus is a MRI (Page 16, Para 0053). Gropper teaches a database with a browser (Claim 25 & Page 5, Para 0020). Gropper teaches wherein the schedule module supports an editing mode (Page 35, Para 00136). Gropper provides progress information related to the execution of the operational items during an imaging session (Claim 18 & Page 16, Para 0054).

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1,
   148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.

Page 4

Application/Control Number: 10/595,471
Art Unit: 3768

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

 Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gropper et al. (WO 03/046689) in view of Karmalawy et al. (US Patent No. 6,603,991 B1).

Claim 9: Gropper teaches a control system to control the execution of operational items by the diagnostic imaging system (Page 16, Para 0053).

Gropper teaches a user interface coupled to the control system, the user interface including a scheduler module which generates an ordered selection of operational items autonomously ordered by the selector module for execution under control of the control system (Page 14, Para 0046). Gropper teaches the ordered selection being generated by arranging the operational items in said ordered selection of operational items based on parameter settings of the operational items wherein the scheduler module is configured to issue instructions to the user promoted by the operational items during imaging (Page

Art Unit: 3768

3, Para 0009 & 0011, Page 4, Para 0013-0014, Page 11, Para 0036, Page 14-15, Para 0048, & Claim 24 & 26). Gropper teaches wherein the imaging apparatus is a MRI (Page 16, Para 0053). Gropper teaches a database with a browser (Claim 25 & Page 5, Para 0020). Gropper teaches wherein the schedule module supports an editing mode (Page 35, Para 00136). Gropper provides progress information related to the execution of the operational items during an imaging session (Claim 18 & Page 16, Para 0054).

Gropper teaches various imaging modalities [MRI, X-ray, etc] (Page 15, Para 0051) but fails to teach patient displacement among the various imaging modalities. However, Karmalawy teaches a displaceable patient support (Figure 7, Element 7) controlled by a control system to displace the patient support among the various imaging stations (Col. 5, Line 59-67).

It would have been obvious to one of ordinary skill in the art to modify the system of Gropper to include control of a displaceable patient support as taught by Karmalawy in order to allow for close correspondence between the locations of the patient's internal organs during both a CT scan and a NM scan, which will provide more detailed or richer view of the patient's internal organs (Col 5, Line 36-44).

 Claims 12 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gropper et al. (WO 03/046689) as applied to claim 9 above, and further in view of Karmalawy et al. (US Patent No. 6,603,991 B1).

Art Unit: 3768

Claim 12 & 13: Gropper teaches the schedule modular issuing the instructions [worklist item/tasks] (Page 16, Para 0055) but fails to teach specific nature of the imaging instructions. However, Karmalawy teaches modality guidance tools which determine information should be provided to a technologist during an imaging session to guide a technologist trough a properly orchestrated imaging protocol (Col. 9, Line 34-39 & 61-65).

Thus it would have been obvious to one of ordinary in the art to modify the system of Gropper to include the guidance system of Banks which is capable of providing protocol instructions, such as when to inject the contrast agent and when to apply the RF coil, in order to guide a technologist trough a properly orchestrated imaging protocol (Col. 9, Line 61-65).

# Response to Arguments

8. Applicant's arguments filed 06/11/2010 have been fully considered but they are not persuasive. The Applicant submitted arguments that there is no suggestion in Gropper that the worklist items or order of a worklist are in any particular order or sequence. The Examiner respectfully disagrees. Gropper states, "Worklists are assembled [ordering of items] from worklist items by using a customizable set of scoping rules to determine the worklist items to be included in each worklist (Page 3, Para 0011). The Examiner contends that the order of operations is an important factor within the worklist of Gropper. For example, Figure 2 discloses a usage scenario of the worklists of Gropper. The wordlist would be inoperable if the worklist was performed out of order the

Art Unit: 3768

Transcriptionist worklist cannot be completed until the Radiologist worklist was finished in order for there to be a radiology report to transcribe. Gropper further stats that the use scenario being described is narrow in function [Page 18, Para 062] but that the system of Gropper can have other worklists such as an emergency room worklists, quality control worklists, hospital ward or department worklists (Page 18, Para 0063). All of which would need to be properly assembled into the use scenario of Figure 2. The Examiner contends the order of operations within Gropper is performed and that the ordering/sorting is meaningful.

The Applicant submitted arguments that Gropper does not disclose or fairly suggest a control system that controls the execution of operational items of a worklist by a diagnostic imaging system. The Examiner disagrees. The control system of Gropper is inherent. Every MRI imaging system in order to function or execute operations needs a control system. The MRI systems typically handle a list of jobs to be completed. The Applicant contends that the only control system is the human technician. However, Gropper states that in cases where automatic transfer of the worklist is unavailable such as MRI systems not being able to interface with the internet, then the worklist can be manual entered by the technician. Gropper is clear in explaining a specific instance in where a human technician would be needed to act as an interface between two platforms otherwise automatic transfer of the worklist is preferred (Page 16, Para 0053).

The Applicant submitted arguments that Gropper does not disclose or fairly suggest a scheduler module which generates an ordered selection of

Art Unit: 3768

operational items autonomously ordered by the scheduler module for execution under control of the control system. The Examiner respectfully disagrees. The worklist module prepares a worklist item (Page 11, Para 0036) and orders/sorts it (Page 3, Para 0011 & Page 7, 0026). Further the Applicant submitted arguments that Gropper does not disclose or fairly suggest a scheduler module configured to issue instructions to the user prompted by the operational items. The Examiner respectfully disagrees. The worklist of Gropper is instructing a transcription to transcribe a certain dictated report or instructing a technician on what procedure to perform (Figure 2). Further Gropper discloses automated adding or removal of worklist items in response to actions being taken with respect to a data item (Page 4, Para 0013).

The Examiner contends that based on the Applicant's Specification on Page 2-3, the terms operational item and parameter setting is described as disclosure are broad terms. Operational items include lay out of the display (display layout Page 32, Para 0122), handling patient information Page 14, Para 0046) and parameters such as type of examination Page 14, Para 0048). Given the most broad and reasonable interpretation the disclosure of Gropper reads on the Applicant's claim language. The rejection is deemed proper and is hereby maintained.

#### Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3768

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE BOR whose telephone number is (571)272-2947. The examiner can normally be reached on M-T 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Page 10

Application/Control Number: 10/595,471

Art Unit: 3768

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./ Examiner, Art Unit 3768 /Long V Le/ Supervisory Patent Examiner, Art Unit 3768